PETROLEUM ASSOCIATION OF NEW ZEALAND

SUBMISSION TO THE COMMERCE COMMISSION

in response to
the Commission's Draft Determination
on
an application for authorisation to enter into arrangements
to jointly market and sell gas produced
from the Pohokura natural gas field
by
OMV New Zealand Limited; Shell Exploration New Zealand Limited;
Shell (Petroleum Mining) Company Limited and
Todd (Petroleum Mining Company) Limited

June 2003

Introduction

1. The Petroleum Exploration Association of New Zealand (PEANZ) operates as a trade association to promote the interests of petroleum producers and explorers in New Zealand. Its mission is to promote a legislative, administrative, economic and social framework which efficiently and effectively facilitates safe, environmentally-responsible, and profitable oil and gas exploration, development and production. PEANZ represents members who are actively involved in oil and gas exploration and mining throughout New Zealand.

2. A list of PEANZ members is attached as Appendix A. PEANZ is conscious that its membership includes the three applicants, but wishes to emphasise to the Commission that this submission has been approved, and is supported by, all of the producer and explorer members.

3. A number of issues are raised by the draft determination which will impact on all petroleum explorers and producers in New Zealand, and the future direction of the petroleum exploration and production industry in New Zealand generally. For this reason, PEANZ considers it appropriate to make this submission identifying and commenting on these matters.

Executive Summary

4. As a general principle, PEANZ supports:

   (a) a competitive gas market and the development of gas market arrangements supporting a competitive gas market; and

   (b) joint marketing and field-specific sales of gas by a gas field joint venture, as a necessary step in the evolution towards a more competitive gas market.

5. PEANZ does not agree with the Commission's preliminary conclusion in the draft determination that joint marketing and sales by a gas field joint venture would substantially lessen competition. The reasons are as follows:

   (a) The New Zealand production market for gas is immature and lacks depth and liquidity;

   (b) Separate selling of gas by a gas field joint venture will not provide additional depth or liquidity to the existing market;

   (c) It must be market conditions that support separate selling of gas. Forcing the separate selling of gas in an immature market will stifle development of market competition, rather than facilitating it;

   (d) The key to development of a more competitive gas market is greater exploration with a consequential increase in the number of fields (and therefore market participants) producing gas, with no single field being predominant in the market. Exploration and production are inextricably linked. It is unlikely that a replacement Maui gas field will be found in the short term and so the likely field profile going forward will be more, smaller sized fields;

(e) The inability to jointly market and sell gas by a gas field joint venture, and risks and uncertainty associated with separate marketing, will act as a disincentive for exploration as it will impact on decisions regarding well economics and field development. It will also create a disincentive for new explorers looking to expand their international risk portfolios by taking a position as a joint venture party in a New Zealand exploration permit. It is important that the appropriate government policies and processes are in place to facilitate market development as more gas fields and production come on stream, however, requiring separate selling in the current market environment will be perceived as adding to, rather than detracting from, market risk.

(f) Separate selling requires some form of gas balancing mechanism. Gas balancing requires a much deeper and more liquid market than currently exists in New Zealand, or is likely to exist in the foreseeable future. Overseas markets have a wealth of litigation precedent that has assisted with the evolution of informal market rules and expectations for individual markets. However, market rules and expectations evolve in the context of particular and specific market conditions. For this reason rules and situations developed in another market will not automatically translate and be relevant in New Zealand.

(g) Technical field development decisions required to support separate marketing of a new gas field mean that, of necessity, any separate marketing will be highly co-ordinated. Separate selling may result in more contracts in the market but any competitive gain will be marginal only.

6. If the Commission's final determination confirms its preliminary conclusion that joint selling will substantially lessen competition, PEANZ would ask that the Commission provide some guidance on the following issues:

(a) When, and in what circumstances, joint selling would not substantially lessen competition – i.e guidance as to the trigger thresholds that would require an authorisation; and

(b) In what circumstances will authorisation be likely to be granted.

7. PEANZ realises that such guidance is not the purpose of this application, and that in each case, a joint marketing proposal will need to be considered on the specific facts and circumstances. However, a final determination that concludes joint marketing and sales of Pohokura gas would substantially lessen competition will have a significant impact on the structure exploration industry going forward. The importance of natural gas to the New Zealand economy and the predominance of exploration joint ventures means that more rather than less certainty is important for continued exploration and stimulation for new producers and fields to come onto the market.

8. PEANZ is concerned that if in the future, the Commission looks to impose marketing and selling conditions similar to those proposed in its draft determination on joint venture parties discovering gas, the result will be reduced exploration and a consequential loss of production activity in New Zealand.

Background

9. Reliable energy supply is critical to the New Zealand economy because:

(a) a lack of adequate energy supply would have significant detrimental impacts on the success of otherwise major value-generating industries, particularly those competing in international markets; and

(b) the social and employment ramifications of an inadequate energy supply are major, including in the forestry and wood processing sectors (the "wall of wood" sector), dairying, steel, cement and aluminium manufacturing industries, as well as in the petroleum exploration and production sector itself.

10. Natural gas is a critical element in New Zealand's energy supply mix because:

(a) subject to its availability, it is the preferred fuel for overdue new electricity generating capacity;

(b) it is currently the most efficient and reliable swing producer fuel for electricity generation – especially in dry or "low wind" years;

(c) it is a preferred fuel (compared with coal and oil) in terms of assisting the country achieve its short to medium-term Kyoto Protocol commitments;

(d) "*….gas is critical not only for direct users but for New Zealand's electricity supply security.*" – Minister of Energy Pete Hodgson to GANZ, 31 March 2003. The current drive towards increased renewable energy supply will not of itself deliver the year-round, "all-weather" reliability required for economic survival and growth.

11. The Government's March 2003 Policy Statement on the Development of New Zealand's Gas Industry (Gas Policy Statement) also acknowledges the position of natural gas in the New Zealand economy:

(a) "*The Government is committed to a sustainable and efficient energy future. Natural gas will play a significant part in achieving that commitment*" (para 1); and

(b) "*The Government welcomes investment in exploration and development of new gas fields."* (para 3)

12. Further, in its Programme of Action for Sustainable Development for New Zealand (January 2003) it is noted that Government was intent on: "*promoting gas exploration and reviewing the regulatory regime for gas to improve market institutions"*.

13. A strong, vibrant and sustainable petroleum exploration and production industry is an essential component of the Government's vision for a sustainable and efficient energy future and to delivery of the energy supplies that New Zealand needs to achieve its economic growth objectives.

The New Zealand Exploration Environment

14. New Zealand is under-explored by world standards and new developed gas reserves are significantly below annual consumption. As well, the rate of discovery of new gas reserves is not replenishing current reserves in order to meet future demand.

15. Petroleum exploration trends in New Zealand will always be cyclical around the life of developed fields. New Zealand is currently at the end of a cycle which has been dominated by the Maui gas field. The recent Maui reserves re-determination and consequential reduction in estimated field reserves has shortened the end of this cycle by two years and possibly more depending on the offtake profiles from the field. While such a reduction is not outside the parameters of uncertainty within which the petroleum exploration industry operates, it has highlighted insufficient levels of gas exploration to fill the market gap in the short to medium term. New Zealand is in a gas deficit situation right now, with major users either having to cut back consumption (eg Methanex) or switch fuel (eg Contact Energy's New Plymouth power station and Genesis' Huntly power station). This situation will continue to worsen if new fields do not come on stream within a few years and continue to so.

16. New Zealand exploration is capital constrained. We compete in an international market for exploration capital. Capital for significant exploration activity (as opposed to exploration activity which is focussed on identification of prospects) competes internationally with areas where there are bigger markets (and therefore less market risk), lower exploration costs and equivalent or better reserves prospectivity. Some active and established exploration companies have recently noted that their returns on capital investment in exploration in New Zealand must achieve double-digit figures, and that potential reserves must be such that significant year-on-year production growth can be achieved in the future, if New Zealand is going to be able to compete against alternative international investment destinations.

17. Investment in petroleum exploration has increased over the past few years, however much all of this activity has been focussed on oil rather than gas. This is largely the result of explorers reacting to a market dominated by existing Maui gas at a price that could not sustain any sort of commercially viable development no matter how large the find might be. Any gas that has been discovered has been in small volumes, and even if aggregated, will not sustain a post-Maui era.

18. PEANZ notes the Commission's comments at paragraph 136 of the draft determination in relation to the Crown Minerals website description of the current level of exploration activity in New Zealand as "high". PEANZ agrees with this statement in the relative sense that exploration activity is higher today than it has

been in the past[1]. However, it is not high in the context of the number of wells required to meet demand. A three-fold increase in the number of wells drilled every year for the next ten years is required to ensure that we can discover the gas reserves necessary to meet demand.[2].

19. It is also relevant to note the number of exploration permits issued by the Ministry of Economic Development is no indication of the actual levels of exploration activity. The grant of such a permit does not necessarily translate into or equate with the levels of exploration activity experienced in reality. While there has been a record number of wells drilled in the past 2 or 3 years, most of these new wells have been appraisal wells and there is a significant difference between appraisal wells and wildcat wells into new prospects when assessing exploration trends.

20. Market risk and capital investment are closely linked – market risk perceptions will influence assessments/availability of investment capital but without depth of supply it is difficult for a market to develop.

21. Exploration costs are high. Due to New Zealand's geographic isolation and low exploration activity the costs of mobilising and demobilising drilling rigs, vessels and specialist services are high compared to other regions of the world, particularly for exploration offshore New Zealand which has the greatest potential for future major gas discoveries.

22. Absence of transmission infrastructure is also a significant factor in the reluctance to explore in obvious gas-prone areas remote from the existing North Island gas reticulation infrastructure. Exploration activity has in the main been focussed on Taranaki, the known province of production where there is established infrastructure. Exploration investors cannot assume that if a major gas field is found, major downstream customers would help develop the infrastructure necessary to get the gas to its market destination. This is an optimistic belief and fails to take account of the capital constraints identified above. Significant time and negotiation is required to arrive at a satisfactory commercially acceptable outcome for all, and as a consequence there is a very real and high probability that any new finds in remote parts of the country (eg in the South Island) are likely to remain in-ground and "stranded".

23. For the same reason any risk and uncertainty in the regulatory environment will also impact on exploration investment decisions.

24. PEANZ notes the Commission's comments at paragraph 497 of the draft determination, and accepts that every joint marketing proposal will be fact specific and require to be considered on its merits. However, the reality is that the exploration sector will see the Commission's determination as part of the regulatory and market environment.

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[1] Note some of the wells included by Crown Minerals are sidetrack to appraisal wells and would not normally be considered as separate wells in their own right.

[2] Beggs, JM (2003) *Moving on From Maui*. Paper to the Utilicon Conference, 31 March - 3 April, Auckland; O'Connor, S (2003) *New Developments in Gas Field Exploration & Expected Yields and Timeframes*. Paper to the NZ Gas Industry Reform Conference, 13 & 14 May, Auckland; Taylor, Dr LWH (2000) *Achieving a Sustainable Gas Industry*. Paper to the NZ Petroleum conference, 19-22 March, Christchurch;

25. A final determination which concludes that, in the current market environment, joint marketing and gas sales by a gas field joint venture will substantially lessen competition will be perceived by new entrants as a disincentive to enter the New Zealand exploration sector. It will also be perceived by existing participants as a disincentive to increase current levels of exploration. Potential and current exploration joint ventures will expect that the Commerce Commission will adopt similar reasons in the future, particularly as to its concerns and basis of assessment for whether or not joint marketing will, or be likely to, substantially lessen competition. To the extent that the Commission has identified particular concerns, eg delay of incipient pro-competitive market developments, these are likely to apply to other joint ventures.

Market Definition

26. For the purposes of this submission, PEANZ accepts the market definitions adopted by the Commission – namely, a national natural gas production market (first sale after the well head) and a national natural gas wholesale market (subsequent sales to large end users (industrial and electricity generation) and retailers). PEANZ does however note that there is a high degree of vertical integration between the exploration market and the production and wholesale markets because:

(a) all producers are also explorers;

(b) the objective of exploration is production; and

(c) all buyers in the wholesale market are also buyers in the production market.

27. In particular, the inter-relationship between the exploration and production markets and the lack of separate exploration "transactions" should not be overlooked. The flow-on effect of any restrictions in the production market are likely to be felt in the exploration market because today's explorers are tomorrow's producers.

Impact of the Commission's analysis on the New Zealand Exploration Environment

28. The preliminary conclusion reached by the Commission in the draft determination is that joint marketing and sales of gas by a gas field joint venture would substantially lessen competition. The Commission has acknowledged that separate marketing would not, in this case, bring new producers into the market (paragraph 401) and that ability to increase prices was unlikely to be materially different under either the factual or the counterfactual. Nonetheless the Commission has assessed that the overall lessening of competition is likely to be large. If these preliminary conclusions are adopted in the final determination they will have a significant impact on the exploration sector. This is because the exploration sector largely operates through joint ventures.

29. As the Commission has noted, risk is both inherent and very high in the exploration process. Joint ventures are one of the key strategies for managing that

risk. The bulk of New Zealand exploration permits are held in joint venture ownership. As exploration joint ventures are, in New Zealand at least, a precursor to production joint ventures, any successful exploration which results in gas production will also be owned and produced under joint venture arrangements.

30. In many cases exploration joint ventures have three or more participants and it is not unusual to have quite small percentage interests. Smaller stakeholders generally provide a necessary source of finance into the joint venture as a means of spreading risk. Such companies are unlikely to want to be involved in marketing product, at least until the New Zealand market develops greater depth and liquidity. If faced with no choices other than to sell out their interest or undertake separate marketing, these sources of critical (usually overseas) capital are likely to cease to be available or at the very least much more difficult to attract to New Zealand exploration joint ventures.

Competitive gas market

31. PEANZ supports a competitive gas market and the development of gas market arrangements that will support a competitive gas market. PEANZ disagrees with the Commission's assessment that joint marketing will substantially lessen competition in the gas production market by reason that it will slow or inhibit the rate at which a more competitive market may evolve.

32. A number of conditions are necessary preconditions to stimulate and drive a more competitive gas market. The Commission has noted at paragraph 165 of the draft determination the characteristics identified by the ACCC as the market features necessary to develop before separate marketing would be viable in Western Australia. PEANZ agrees with this assessment of the market conditions necessary as a precondition for a competitive gas market in which separate gas markets would be feasible. The greater the number of these features that existed, then the greater the likelihood that separate marketing would be feasible.

33. The features identified as enabling separate gas marketing are:

- A significant increase in the number of customers
- Entry of competitive suppliers
- Additional transportation options
- Storage
- Entry of broker and aggregators
- Creation of gas related financial markets
- Development of significant short-term and spot markets.

34. None of these market features exist in New Zealand in any material respect:

(a) The number of customers is static or declining – Genesis and Solid Energy have recently released details of a contract to supply 11 million tonnes of coal to Huntly Power Station over eight years to 2011. This equates to approximately 240PJ of gas, which therefore can no longer be assumed to be ongoing demand. Additionally, Methanex Corporation has announced plans to complete a $US500 million methanol plant in Western Australia by the end of 2005 as part of a planned new Asia

Pacific hub. This will potentially see reduced demand for gas at Methanex's New Zealand plant. Methanex currently accounts for nearly 39% of New Zealand's annual gas consumption.

(b) The most significant, and only major new entry of gas suppliers over the last five years has been Swift Energy which accounted for 6% of 2002 production (based on table 1 in the draft determination), approximately 9% of developed reserves (table 9) and less than 5% of total reserves (table 3). OMV is also a recent new entrant – acquiring 10% of the remaining (fully contracted) Maui gas field and a 1/3 share of the Pohokura field. OMV's entry does not, however, represent an increase in competitors as it has entered the market through acquisition of existing known reserves and has, in each case, replaced an exiting competitor without any increase in the overall number of gas producers in New Zealand[3].

(c) While there was also gas production in 2002 from the Ngatoro and Kaimiro fields, the combined production from these field did not exceed 0.7% of total annual production and should not be considered as entry of significant competitive suppliers.

(d) None of the other market features identified by the ACCC exist in New Zealand.

35. The Commission appears to have given considerable weight to its finding that separate marketing and sales of Pohokura would stimulate a more competitive market. PEANZ disagrees. The ACCC has acknowledged that the competitive market features (referred to at paragraph 33 above) are necessary preconditions for separate marketing. PEANZ does not believe that it is possible to turn this around and assume that separate marketing will create these conditions. In fact, the more likely outcome is that separate marketing would fail without those market conditions.

36. Separate marketing of Pohokura gas will only notionally create three new suppliers. Each of these suppliers are current players and the Commission has itself acknowledged that the output with joint marketing is likely to be similar to output in the counterfactual (paragraph 402). The Commission's conclusion at paragraph 434 of the draft determination that three firms marketing Pohokura gas would increase depth is questionable. On the contrary, PEANZ believes that the likelihood of a more competitive market developing will be stifled by an insistence on separate marketing into an immature market.

37. The most significant driver for development of competition will be an increase in the number of producing fields and the number of industry participants actively exploring. An increase in the number of participants without any increase in the number of fields available to the market alone is unlikely to facilitate development of competition because of the need for highly co-ordinated field development. Similarly, an increase in the number of producing fields without an increase in the number of producers is also unlikely to drive competition.

[3] Although OMV purchased its interest from Shell this was essentially an acquisition of part of the Fletcher interest acquired by Shell. The total number of parties to the Maui Joint Venture did not increase.

38. If New Zealand can achieve increased exploration and consequential increases in production, then these factors will drive evolution of the other market conditions identified by the ACCC. The market evolution which can be seen in the eastern regions of Australia is being driven off a much larger number of participants, fields and field size than currently exist in New Zealand. Until these market conditions exist, it is highly questionable whether separate marketing is feasible. The focus for the New Zealand exploration and production sectors in the short to medium term should be to encourage new investment and attract as large a number of explorers as possible to New Zealand. Only then are we likely to see sufficient numbers of gas fields in production to support separate marketing. Until then, joint marketing and sales by gas field joint ventures is more likely to facilitate than deter future development of a competitive gas production market.

Market Risk

39. The Commission has concluded that no development of Pohokura is an unlikely counterfactual. PEANZ does not seek to comment specifically on Pohokura but makes the following more general comments.

40. As noted above, petroleum exploration trends in New Zealand, and consequently the New Zealand gas market will always be cyclical around the life of developed fields. The number and size of future gas fields is impossible to determine with any precision. However, PEANZ accepts that the likely future development of the New Zealand gas market will include a greater number of, and smaller, fields than has been the case in the past. As the market grows and more fields come on stream, with diverse ownership, no single field will have a predominant role and volatility will reduce. Currently, the market is very volatile because we are at the end of a cycle where there has been one overwhelmingly predominant field, which is the Maui gas field. The current volatility has been exacerbated by the short fall in expected reserves.

41. A purely short term perspective on supply and demand provides a distorted understanding of the market. The lack of depth in the New Zealand market means that volatility exists both for supply and demand. Current perceptions of demand are highlighted by the depletion of the Maui gas field. It is simplistic to say that because there are current high levels of demand, that development will occur at any cost. Both exploration and production investment decisions will be assessed, on average, over a 10-15 year period, and are, of necessity, made in the context of pricing of alternative fuels (eg Genesis's purchase of coal and Mighty River Power's assessment of bringing back Marsden B for reserve generation) and also international alternatives (eg Methanex moving offshore). The fact that very little progress has been made to develop Kupe, notwithstanding the known depletion of Maui, highlights that demand alone does not guarantee field development. Until there is a deep and liquid gas market, any development of a gas field in New Zealand will require a significant cornerstone supply contract if it is to be viable.

Gas Balancing

42. There are a number of essential components for separate marketing from a single field. These include gas balancing and an agreed and co-ordinated approach to

field development. In each case, complex arrangements need to be agreed between the joint venture parties.

43. PEANZ notes the Commission's conclusions on gas balancing, but believes that the Commission has underestimated the complexities and risks involved in the context of an immature market such as New Zealand for the following reasons:

(a) Where gas balancing occurs elsewhere in the world, it does so in deep and liquid markets.

(b) Gas balancing arrangements are notoriously complex and a frequent source of litigation. Overseas markets have a wealth of litigation precedent that informs market rules and expectations.

(c) Litigation outcomes and the development of accepted market practice/rules are an inevitable part of the process of development of gas balancing market arrangements. Litigation risk reduces over time, but is high in the evolutionary stages of market development.

(d) While international experience and precedent provides a useful starting point, it cannot simply be imported into New Zealand by individual participants and relied upon as a means of bypassing the evolutionary development of a New Zealand market context. Precedents from other jurisdictions are specific to those jurisdiction and have evolved in the context of the particular market circumstances.

(e) Solutions and practices adopted in one market will only translate into another market if the market conditions resemble each other in major respects. For example, cash balancing only works if there is a spot market.

Conditions

44. PEANZ does not wish to comment on the Pohokura conditions per se but rather to comment generally to the extent that these conditions may be the type of conditions imposed by the Commission in the future.

Requirement for Development by a Certain Time

45. A condition which sets a prescriptive timeframe for gas production is unrealistic and impractical. Field appraisal is a complex and on-going process. Marketing and preliminary negotiations for the sale of gas are frequently undertaken concurrently with field assessment, although contract terms will not be finalised until field development is complete. The authorisation process will likely occur in tandem with field assessments, and whether or not separate selling is required will have a significant impact on field development plans (including plant and process arrangements and structures) and the need for additional (complex) commercial arrangements between the parties.

46. Imposition of a time to market condition for joint selling of the nature suggested in relation to Pohokura will create a high degree of risk and uncertainty. Such a condition ignores the reality that a number of risk factors that can delay production

are beyond the control of the relevant joint venture parties - for example, unexpected geological conditions, bad weather delaying either drilling of production wells or plant construction, or delays in approval of resource consent conditions. The capital involved in developing a gas field is such that any delay in achieving a return on capital invested has a significant cost, therefore a joint venture will always be incentivised to get its gas to market as quickly as possible. Additional risk in the nature of loss of an authorisation for joint selling will impact on investment discussions.

Restriction on Assignment

47. The Commission has suggested that an authorisation of this nature should not be extended to future assigns and successors of the relevant joint venture parties. PEANZ believes that imposing such a condition would reduce the flexibility of parties to move within the market. This would be a factor in lessening the incentives to be involved in exploration activity in New Zealand. Reserves is a key factor in entry of new participants to the exploration and production sectors. While not always the case, generally companies enter the New Zealand exploration sector in one of two ways:

(a) They will look to replace reserves (in an international portfolio) by buying into an already producing field. This enables access to working capital (from the return on their interest in the already producing field), thereby facilitating further exploration activity.;

(b) Alternatively, a company will take an interest in an exploration permit and only expand their portfolio in New Zealand when, or if. that investment becomes a bankable reserve.

48. Restricting an authorisation to the joint venture parties to the application will severely limit flexibility for potential new entry.

Ringfencing

49. The Commission has also indicated in its draft determination that it may make the Pohokura authorisation conditional on the implementation of a ringfencing arrangement. Again, PEANZ believes that such a condition would have an impact on exploration incentives. Ringfencing potentially inhibits smaller operators from aggregating reserves and, as such, stymies such operators' ability to expand their exploration activity.

Limited Period of Authorisation

50. Any time limitation on the period of authorisation must be consistent with field development economics and the objective of securing a certain and reasonable capital/risk return for the exploration joint venturers. This, and not a desire to stimulate a more competitive market structure, should be the primary determinant of any time limit on a joint selling authorisation. The factors identified by the Commission at paragraphs 509 through to 511 omit any reference to, and do not indicate that any consideration be given to, these factors. In this regard they fail to recognise the fundamental risk/reward drivers that drive exploration and field

development. Once again, the result will be a less attractive exploration environment.

Conclusion

51. PEANZ believes that the principal driver for a more competitive gas production market is greater exploration with consequent increase in the number of gas fields in production. Hand in hand with this is government policy that facilitates development of supporting marketing structures such as access to gas transmission and a spot market. Policy alone, however, will not deliver a competitive gas market if the underlying market conditions do not exist to support a competitive market. The focus for New Zealand in the short to medium term is to attract and retain increased investment in exploration. A final determination which concludes that joint marketing and selling by a gas field joint venture substantially lessens competition for the reasons outlined in the draft determination will have significant ramifications on the perceived attractiveness of New Zealand for exploration capital, as will any authorisation on the basis of the conditions proposed in the draft determination.

Appendix A

Membership Status at 12 June 2003

Company

Petroleum producers:
Shell Petroleum Mining Company Limited
Todd Energy
Swift Energy NZ Limited
OMV

Petroleum explorers:
Preussag Energie GmbH (now OMV)
Westech Energy NZ
Genesis Power
Bridge Petroleum
Delta Oil Taranaki Pty
Horizon Oil Pty
Kenham Holdings Limited

Associate Members – companies:
Bell Gully Buddle Weir
BTW Associates
Chapman Tripp Sheffield Young
Ernst & Young
GeoSphere Exploration Limited
Halliburton NZ Limited
IGNS: Hydrocarbons & Information Services
KPMG Legal [now Kensington Swan]
Marsh McLennan
Minter Ellison Rudd Watts
Oil Drilling & Exploration
Parker Drilling
Phillips Fox
Plant & Platform Consultants Limited
PriceWaterhouseCoopers
Russell McVeagh
Shell Todd Oil Services Limited
Simpson Grierson
URS New Zealand

Associate Members – individuals:
Gavin Adlam
Arete
Brooklands Energy Consultants Limited
Geological Research Limited
Richard Hale (Hale & Twomey Limited)
Exploration Strategy (Chris Haslam)
Dr Peter Kamp
Logan Consulting
David Manhire
Resource Solutions
Wairarapa Geological Services